

Amendments to the Specification

Please replace the paragraph beginning on page 4, at line 12, with the following amended paragraph:

Amino acid, as is known in the art, refers to an organic acid in which one of the CH hydrogen atoms has been replaced by NH₂. Preferably, an amino acid is an α -amino acid, having a formula R-CHNH₂-COOH. As is also known, there are twenty different amino acids that occur in nature and are used naturally to build proteins. Other, non-natural amino acids have also been prepared (see, for example, <http://www.cco.caltech.edu/~dadgrp/Unnatstruct.gif>, which displays structures of non-natural amino acids that have been successfully incorporated into functional ion channels). Also, one or more of the amino acids may be modified, for example, by the addition of a chemical entity such as a carbohydrate group, a hydroxyl group, a phosphate group, a farnesyl group, an isofarnesyl group, a fatty acid group, a linker for conjugation, functionalization, or other modification, etc.

Please replace the paragraph beginning on page 7, line 9, with the following amended paragraph:

Operably linked is used to describe [[to]] two segments of polynucleotide sequence that can affect each other. In a particularly preferred embodiment, one of the two segments is a sequence that binds a protein (e.g., polymerase, enhancer-binding factor, and transcription factor), and the binding of the protein to the sequence leads to the transcription of a gene sequence located in the second segment. In another particularly preferred embodiment, the binding of a molecule (e.g., nucleic acid, small molecule, protein, and peptide) to one segment may inhibit or enhance the binding of another molecule (e.g., nucleic acid, small molecule, protein, and peptide) to the second segment. For example, the first segment may comprise an enhancer, and the second may comprise a promoter whose occupancy by RNA polymerase is affected by the occupancy of the enhancer. Preferably, two operably linked segments are covalently linked, but any type of association sufficient to achieve the desired results is considered to be operably linked in the context of the present invention.